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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------------------|-----------------------------|
| 10/652,745 | 08/29/2003 | Charles S. Schasteen | NVI 5252.4 | 1765 |
| 321 7590 12/11/2007 SENNIGER POWERS ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102 | | | EXAMINER KANTAMNENI, SHOBHA | |
| | | | ART UNIT 1617 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/652,745 | Applicant(s) SCHASTEEN ET AL. | |
| | Examiner Shobha Kantamneni | Art Unit 1617 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 75,77-104 and 113-133 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) NONE is/are allowed.
- 6) ☒ Claim(s) 75,77-104,113-133 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08). Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's amendment filed on 09/26/2007, wherein claims 75, 77, 81-85, 98, and 99 have been amended, and claim 76 has been cancelled. Applicant's amendment also added new claims 113-133.

Applicant's amendment by deleting the term "subject" overcomes the rejection of claims 75, 96, 97 under 35 U.S.C. 112, second paragraph, as being indefinite.

Applicant's amendment by limiting to at least two specific organic acids overcomes the rejection of claims 75-80, 82-85, 90, 92-93, 96-99, 104 under 35 U.S.C. 102(b) as being anticipated by Ivey et al. (US 5,928,686, PTO-892), and as evidenced by Blake et al. (US 2,938,053, PTO-892).

Applicant's amendment by limiting to at least two specific organic acids overcomes the rejection of claims 75-82, and 96 under 35 U.S.C. 103(a) as being unpatentable over Paquet et al. (CA 1261855, PTO-892).

Claims 75, 77-104, 113-133 are examined herein.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 75, 77-104, and 113-133 are rejected under 35 U.S.C. 112, second paragraph, as being vague, and indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitations "an acceptable diluent, adjuvant or excipient" in claims 75, 98, 99 is vague and indefinite, as it is not clear what compounds this recitation encompasses, the specification does not provide as to which diluents, adjuvants, and excipients are acceptable in the instant invention, and one of ordinary skill in the art could not ascertain the metes and bounds as to "an acceptable diluent, adjuvant or excipient."

Claim 104 is further rejected under 35 U.S.C. 112, second paragraph, as being vague, and indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 104 recites the limitation "said animal food" in the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 75, 77-80, 82-87, 90-93, 96-98, 104, 113, 115-119, 133 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ivey et al. (US 5,928,686, PTO-892), and as evidenced by Blake et al. (US 2,938,053, PTO-892), in view of Bland et al. (US 5,591,467, PTO-892).

Ivey et al. discloses a high moisture solid formulation which contains about 30 % to about 90 % by weight of water, and between about 10 % to about 70 % by weight of dry matter wherein the dry matter contains 15 % by weight of 2-hydroxy-4-methylthiobutanoic acid. See column 4, lines 1-20, 47-49; lines 59-67; column 14, claims 1,8; column 10, EXAMPLE 3. It is also disclosed that a high moisture having high nutrient profile is prepared by mixing soybean meal, egg white, corn starch, corn meal, Alimet, propionic acid and citric acid. See column 7, lines 1-10; column 11, TABLE 4. Feed formulations comprising Alimet, soy oil, corn starch are also fed to the birds. See column 10-column 11, Example 3, Example 4. The formulation therein is mixed with food and used to feed poultry i.e chicks, and other animal. See abstract; column 1, lines 6-14; column 3, lines 20-26. The high moisture solid may be formed by mixing the ingredients with feed, and heating the mixture by adding hot water. See column 7, lines 10-13. It is also disclosed that a group of one to four day old birds were given 20 g each of a high moisture solid consisting of gelatin and Alimet (2-hydroxy-4-(methylthio)butanoic acid) base with addition of either corn starch or corn starch and lysine. See column 11, Table 3. Further as evidenced by Blake et al. 2-hydroxy-4-(methylthio)butanoic acid has antimicrobial activity, antifungal activity,

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and is used in animal diet particularly poultry. See column 1, lines 39-41, lines 47-50, lines 58-63.

Ivey et al. do not teach the employment of organic acids such as formic acid, lactic acid.

Ivey et al. do not teach the particular amounts of 2-hydroxy-4-(methylthio)butanoic acid, formic acid and propionic acid as in claim 119.

Ivey et al. do not specifically teach that the formulations therein are mixed with food for feeding ruminant animal.

Bland et al. teach that the animal feed composition for feeding animals such as poultry, swine, beef, cattle feed, dairy cattle feed, horse, aquaculture and pets comprise antibacterial agents formic acid, propionic acid, lactic acid.

It is generally considered *prima facie* obvious to combine compounds each of which is taught by the prior art to be useful for the same purpose, in order to form a composition which is used for the very same purpose. The idea for combining them flows logically from their having been used individually in the prior art. As shown by recited teachings of Ivey et al. Blake et al., and Bland et al., the instant claims contain agents such as hydroxy-methylthio butanoic acid, propionic acid, formic acid, lactic acid useful as antimicrobial agents in animal diet particularly poultry. *In re Kerkhoven*, 626 F.2d 848, 205 USPQ 1069 (CCPA 1980).

It would have been obvious to a person of ordinary skill in the art at the time of invention to employ the formulation comprising Alimet, propionic acid, formic acid, and lactic acid to mix with feed for ruminant animals. One of ordinary

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skill in the art at the time of invention would have been motivated to employ the formulation comprising Alimet, propionic acid, formic acid, and lactic acid in animal feeds because Bland teaches that the feed composition for animals such as poultry, swine, beef, cattle feed, dairy cattle feed, horse, aquaculture and pet feed comprise antimicrobial agents.

Furthermore, as the combined teachings of Ivey et al., Blake et al., and Bland et al., renders the claimed composition obvious, the property of such a claimed composition will also be rendered obvious by the prior art teachings, since the properties, namely "killing microbes in food" when mixed with food, "pH of less than about 5", "pH of about 4 to about 5", "pH of about 4.5", and "improved odor" are inseparable from its composition. Therefore, if the prior art teaches the composition or renders the composition obvious, then the properties are also taught or rendered obvious by the prior art. In re Spada, 911 F.2d 705, 709, 15 USPQ 1655, 1658 (Fed. Cir. 1990.) See MPEP 2112.01. The burden is shifted to Applicant to show that the prior art product does not possess or render obvious the same properties as the instantly claimed product. Thus, the methods as taught by Ivey et al., Blake et al., and Bland et al., necessarily result in killing microbes in food, as recited in the claims.

It would have been obvious to a person of ordinary skill in the art at the time of invention to determine or optimize parameters such as effective amounts of 2-hydroxy-4-(methylthio)butanoic acid, formic acid and propionic acid employed in the composition.

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One having ordinary skill in the art at the time the invention was made would have been motivated to determine the effective amounts of 2-hydroxy-4-(methylthio)butanoic acid, formic acid and propionic acid employed in the compositions, since the optimization of effective amounts of known agents, is considered well in the competence level of an ordinary skilled artisan, involving merely routine skill in the art.

It has been held that it is within the skill in the art to select optimal parameters, such as amounts of ingredients, in a composition in order to achieve a beneficial effect. See *In re Boesch*, 205 USPQ 215 (CCPA 1980).

Claims 88-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ivey et al. and as evidenced by Blake et al. (US 2,938,053, PTO-892), in view of Bland et al. as applied to claims 75, 77-80, 82-87, 90-93, 96-98, 104, 113, 115-119, 133 above, and further in view of Pinski et al. (US 2002/0172737, PTO-892).

Ivey et al. Blake et al., and Bland et al. are as discussed above.

The prior art references do not specifically teach that the formulations therein are mixed with food for feeding animal such as aquaculture.

Pinski et al. teaches a particulate foodstuff which is effective for feeding aquatic life such as crustaceans, fish, shell fish, comprising a particulate nutrient feed and an antimicrobial agent which provides shelf life for the foodstuff of at least about 6 months. See page 1, paragraph [0009]. The antimicrobial agent

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therein is selected from propionic acid, salt of propionic acid, citric acid or salt thereof. See page 5, claim 8.

It would have been obvious to a person of ordinary skill in the art at the time of invention to employ the formulation comprising Alimet, organic acids taught by the combination of references to mix with feed for aquatic animal because Ivey et al. formulations have antimicrobial properties according to Blake et al, and Pinski teaches that the feed composition for feeding aquatic animals comprise antimicrobial agents.

One of ordinary skill in the art at the time of invention would have been motivated to employ the formulation taught by Ivey et al. in aquatic feed with reasonable expectation of obtaining aquatic feed formulations that have longer shelf life.

Claims 94-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ivey et al. and as evidenced by Blake et al. (US 2,938,053, PTO-892) in view of Bland et al. as applied to claims 75, 77-80, 82-87, 90-93, 96-98, 104, 113, 115-119, 133 above, and further in view of Friedman et al. (US 4,495,208, PTO-892).

Ivey et al. Blake et al., and Bland et al. are as discussed above.

Ivey et al. do not specifically teach that the formulations therein are mixed with food for feeding companion animal.

Friedman et al. teach that pet food for feeding pets such as dog food contains antibacterial agents.

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It would have been obvious to a person of ordinary skill in the art at the time of invention to employ the formulation comprising Alimet, organic acids taught by Ivey et al, and Bland et al. to mix with feed for companion animals because Ivey et al. formulations have antimicrobial properties according to Blake et al., and Friedman teaches that the feed composition for companion animals such as cats, and dogs contain antimicrobial agents.

One of ordinary skill in the art at the time of invention would have been motivated to employ the formulation taught by Ivey et al., and Bland et al. in dog food because antimicrobial agents are well known to be used in dog food formulations.

Claims 114, 120-132 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ivey et al. and as evidenced by Blake et al. (US 2,938,053, PTO-892) in view of Bland et al. as applied to claims 75, 77-80, 82-87, 90-93, 96-98, 104, 113, 115-119, 133 above, and further in view of Rolow et al. (US 6,355,289, PTO-892).

The combination of references do not specifically teach the employment of butyric acid, phosphoric acid, and the particular amounts of said acids.

Rolow teaches a method of extending the shelf life of tortillas made from corn flour by adding mold growth inhibitors i.e preservatives or antimicrobial agents such as acetic acid, propionic acid, butyric acid, benzoic acid, phosphoric acid. See abstract; column 1, lines 55-58; column 3-column 4.

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It is generally considered *prima facie* obvious to combine compounds each of which is taught by the prior art to be useful for the same purpose, in order to form a composition which is used for the very same purpose. The idea for combining them flows logically from their having been used individually in the prior art. As shown by recited teachings of the prior art, the instant claims contain antimicrobial agents, hydroxy-methylthio butanoic acid, formic acid, lactic acid, propionic acid, butyric acid, phosphoric acid. *In re Kerkhoven*, 626 F.2d 848, 205 USPQ 1069 (CCPA 1980).

One having ordinary skill in the art at the time the invention was made would have been motivated to determine the effective amounts of 2-hydroxy-4-(methylthio)butanoic acid, organic acids and acidulant employed in the compositions, since the optimization of effective amounts of known agents, is considered well in the competence level of an ordinary skilled artisan, involving merely routine skill in the art.

It has been held that it is within the skill in the art to select optimal parameters, such as amounts of ingredients, in a composition in order to achieve a beneficial effect. See *In re Boesch*, 205 USPQ 215 (CCPA 1980).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

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said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 75-82, and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paquet et al. (CA 1261855, PTO-892), in view of Bland et al. (US 5,591,467, PTO-892).

Paquet et al. discloses a method of controlling growth of Clostridium botulinum in manufactured or processed foods employing N-acyl-D-amino acid derivatives which read on instant compound of Formula I. N-acyl methionine is disclosed as the antimicrobial compound therein having anti-microbial activities against organism such as Clostridium botulinum. See abstract. The compounds therein having antimicrobial activity are mixed with food additives in the method for control of microorganisms in food products which contain water/moisture, particularly meat-containing products, and especially red meat containing products. See abstract; page 2, lines 1-5; page 3, line 19-page 4; claims 18-26. The food products include sausage, canned minced meat products, corned beef, luncheon meats, meat products comminuted and stuffed into casings. See page 4a, lines 15-18; page 6, line 21-page 7, line 10; page 12, Table 2 wherein acetyl-D-methionine is disclosed. Paquet et al. also teach that sorbic acid is known to be used as antimicrobial agent. See page 3, line 5.

Paquet et al. does not specifically teach the combination of N-acyl methionine with other organic acids.

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Bland et al. teach that the animal feed composition for feeding animals such as poultry, swine, beef, cattle feed, dairy cattle feed, horse, aquaculture and pets comprise antibacterial agents formic acid, propionic acid, lactic acid.

It is generally considered *prima facie* obvious to combine compounds each of which is taught by the prior art to be useful for the same purpose, in order to form a composition which is used for the very same purpose. The idea for combining them flows logically from their having been used individually in the prior art. As shown by the recited teachings of Paquet et al., and Bland et al. the instant claims contain three antibacterial agents acetyl-D-methionine, and organic acids such as formic acid, lactic acid. *In re Kerkhoven*, 626 F.2d 848, 205 USPQ 1069 (CCPA 1980).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 75, 77, 97, 99-103, 113-117, 133 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doerr et al. (Poultry Science, 74 (1), 23, 1995, PTO-892), in view of Rolow et al. (US 6,355,289, PTO-892).

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Doerr et al. discloses a method of killing mold in ground corn with a moisture content of about 17.5 %, by treating with hydroxy-methylthio butanoic acid. See page 23, abstract.

Doerr et al. does not specifically teach the combination of hydroxy-methylthio butanoic acid with other organic acids, and acidulant such as phosphoric acid.

Doerr et al. do not teach the particular amounts of 2-hydroxy-4-(methylthio)butanoic acid, organic acids and acidulant.

Rolow teaches a method of extending the shelf life of tortillas made from corn flour by adding mold growth inhibitors i.e preservatives or antimicrobial agents such as acetic acid, propionic acid, butyric acid, benzoic acid, phosphoric acid. See abstract; column 1, lines 55-58; column 3-column 4.

It is generally considered *prima facie* obvious to combine compounds each of which is taught by the prior art to be useful for the same purpose, in order to form a composition which is used for the very same purpose. The idea for combining them flows logically from their having been used individually in the prior art. As shown by recited teachings of Doerr et al. and Rolow et al., the instant claims contain agents useful for killing mold such as hydroxy-methylthio butanoic acid, propionic acid, butyric acid, phosphoric acid. *In re Kerkhoven*, 626 F.2d 848, 205 USPQ 1069 (CCPA 1980).

It would have been obvious to a person of ordinary skill in the art at the time of invention to determine or optimize parameters such as effective amounts of 2-hydroxy-4-(methylthio)butanoic acid, organic acids and acidulant.

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One having ordinary skill in the art at the time the invention was made would have been motivated to determine the effective amounts of 2-hydroxy-4-(methylthio)butanoic acid, organic acids and acidulant employed in the compositions, since the optimization of effective amounts of known agents, is considered well in the competence level of an ordinary skilled artisan, involving merely routine skill in the art.

It has been held that it is within the skill in the art to select optimal parameters, such as amounts of ingredients, in a composition in order to achieve a beneficial effect. See *In re Boesch*, 205 USPQ 215 (CCPA 1980).

Furthermore, as the combined teachings of Doerr et al., and Rolow et al. renders the claimed composition obvious, the property of such a claimed composition will also be rendered obvious by the prior art teachings, since the properties, namely "pH of less than about 5", "pH of about 4 to about 5", "pH of about 4.5", "improved odor" are inseparable from its composition. Therefore, if the prior art teaches the composition or renders the composition obvious, then the properties are also taught or rendered obvious by the prior art. *In re Spada*, 911 F.2d 705, 709, 15 USPQ 1655, 1658 (Fed. Cir. 1990.) See MPEP 2112.01. The burden is shifted to Applicant to show that the prior art product does not possess or render obvious the same properties as the instantly claimed product.

Response to Applicant's arguments:

Applicant argues that "both Doerr et al. and Rolow et al. fail to establish that a compound of formula (I) has any antimicrobial activity. Importantly, *In re Kerkhoven* cannot be applied unless the compound of formula (I) has known

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antimicrobial activity.” These arguments have been considered, but not found persuasive. It is pointed out that Doerr et al. discloses a method of killing mold in ground corn by treating with hydroxy-methylthio butanoic acid, i.e the compound hydroxy-methylthio butanoic acid has antimicrobial activity. Rolow teaches acetic acid, propionic acid, butyric acid, benzoic acid, phosphoric acid as mold growth inhibitors. Thus, as shown by recited teachings of Doerr et al. and Rolow et al., the instant claims contain agents useful for killing mold hydroxy-methylthio butanoic acid, propionic acid, butyric acid, phosphoric acid. It is generally considered *prima facie* obvious to combine compounds each of which is taught by the prior art to be useful for the same purpose, in order to form a composition which is used for the very same purpose. *In re Kerkhoven*, 626 F.2d 848, 205 USPQ 1069 (CCPA 1980).

Applicant argues that “As many microorganisms may live and thrive in acidic environments, it is not sufficient to infer that a single organic acid useful against one microbe will provide the same utility against a different microbe. Such an error in extrapolation may be compounded by the fact that organic acids may impact on an organism by a variety of different mechanisms within the cell.” These arguments have been considered, but not found persuasive. The instant claims are drawn to a method of killing microbes in food, a method of killing mold in food, and not to a method of killing a specific microbe in food. Both Doerr et al., and Rolow teach that the compounds therein are useful as mold growth inhibitors, and thus meet the instant claims.

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Applicant argues that "Because the references relied on by the Office do not disclose or suggest the presently claimed method for inhibiting mold by using the recited antimicrobial combinations, the Office appears to be applying "hindsight reconstruction" by using the teaching of the Applicants' patent application as a guide for searching, and analyzing the references in the right way to arrive at the claims at issue." In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

The declaration under 37 CFR 1.132 filed by Dr. Christopher D. Knight is insufficient to overcome the rejection of claims 75, 77, 97, 99-103, 113-117, 133 based upon as being unpatentable over Doerr et al. (Poultry Science, 74 (1), 23, 1995, PTO-892), in view of Rolow et al. (US 6,355,289, PTO-892) as set forth in the last Office action. It is pointed out that the synergistic effect for two organic acid formulations provided by the applicant attached to the Declaration, i.e blend OA 4, which is 0.15% lactic acid, 0.15% propionic acid, and 0.15% HMTBA; and blend OA 6, which is 0.1% lactic acid, 0.1% butyric acid, 0.1% propionic acid, and 0.15% HMTBA is not convincing because no data is provided for the propionic acid alone for comparison. Moreover, figure 7 herein merely

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demonstrate one particular compound of formula (I), HMTBA with two organic acids in the method of killing one particular microbe, *Salmonella*. Thus, the evidence in figure 7 is also not commensurate in scope with the claimed invention and does not demonstrate criticality of a claimed range of the ingredients in the claimed method. See MPEP § 716.02(d). Therefore, the evidence presented in the declaration herein is not seen to support the nonobviousness of the instant claimed invention over the prior art.

Conclusion

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period, will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

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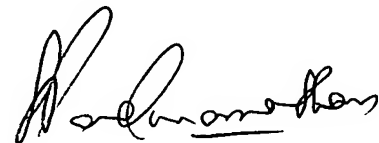
the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shobha Kantamneni whose telephone number is 571-272-2930. The examiner can normally be reached on Tuesday-Thursday, 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, Ph.D can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shobha Kantamneni, Ph.D
Patent Examiner
Art Unit : 1617



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